Title (en)

CONTROL METHOD AND APPARATUS FOR VEHICLE-MOUNTED HYDROGEN SYSTEM, AND VEHICLE-MOUNTED HYDROGEN SYSTEM

Title (de)

STEUERUNGSVERFAHREN UND -VORRICHTUNG FÜR FAHRZEUGMONTIERTES WASSERSTOFFSYSTEM UND FAHRZEUGMONTIERTES WASSERSTOFFSYSTEM

Title (fr)

PROCÉDÉ ET APPAREIL DE COMMANDE DE SYSTÈME À HYDROGÈNE EMBARQUÉ, ET SYSTÈME À HYDROGÈNE EMBARQUÉ

Publication

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Application

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Priority

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Abstract (en)

[origin: EP4084166A1] The present invention relates to a control method and apparatus for a vehicle-mounted hydrogen system and a vehicle-mounted hydrogen system, belonging to the field of fuel cell vehicles. The method comprises: building a pressure prediction model for a gas output by the vehicle-mounted hydrogen system, and determining, according to the pressure prediction model, a predicted pressure value for controlling the vehicle-mounted hydrogen system to output the gas; calculating a difference between the predicted pressure value and a set target pressure value to obtain a prediction error; obtaining an actual pressure value of the gas output by the vehicle-mounted hydrogen system, and calculating a difference between the actual pressure value and the target pressure value to obtain an actual error; comparing the prediction error with the actual error, and when the prediction error is less than the actual error, outputting a predicted pressure value at the next time point by using the pressure prediction model, as a target pressure at the next time point, to control the vehicle-mounted hydrogen system to output the gas. According to the present invention, a change trend of the output pressure of the vehicle-mounted hydrogen system is determined in advance, and the pressure of the gas output by the vehicle-mounted hydrogen system is adjusted in advance, so that hydrogen supplied can meet the requirements of a fuel cell system.

IPC 8 full level

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